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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/998,362

11/29/2001

David Elie-Dit-Cosaque

135886

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24587

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12/28/2005

ALCATEL USA
INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,362

Applicant(s)

ELIE-DIT-COSAQUE ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11,12 and 20 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 13-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1,2,11,12 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Doverspike et al. (Pub No. US2002/0097671 A1).

With regard to claim 1 and 11, Doverspike disclose a method of dynamically (para. [0015]) allocating protection path (restorable connection, para. [0015]; restoration path, para. [0019]) in a WDM network (optical networking, para. [0012]; WDM, para. [0013]; see also Fig. 1) including a plurality of nodes 110-190 (nodes, para. [0012]) coupled by communication links (links, para. [0012]), and router circuitry (OXC, para. [0013]);

information regarding the status (failure, para. [0016] and [0017]) of the network 100 (mesh network, para. [0012]) including information associating specific channels (channels) in each link (optical links) of the node to one or more protection paths (restoration path) (optical links are a collection of channels that route over the same fiber span, para. [0013]) (the restoration path and the service connection path should not belong to a group of links, para. [0015]) (it would have been obvious that there is an association between channels and links), information associating channels (channels) in each link (optical links) to respective working paths (service connection path), and

information on the availability (availability, para. [0019]) of specific channels to be used for a protection path (to share restoration channels, para. [0017]);

in response to receiving a request (requests ... include restoration options ..., para. [0018]; see also para. [0022]) for a new protection path (restoration path, para. [0019]) to protect a defined working path (service path, para. [0019]) in one of said nodes;

said one node to identify (the process of computation, para. [0019]) links that have at least one shareable channel which may be shared (restoration resources may be shared between different restoration paths, para. [0019]) between the new protection path and one or more existing protection paths;

said one node to identify links that do not have a shareable channel but do have an used channel (the remaining channels are unassigned and free, para. [0020]) that may be used for said new protection path;

assigning costs (cost metric, para. [0019]) to identified links; and

determining ("minimum weight" path, para. [0019]) a protection path using said identified links base on said costs.

However, Doverspike fails to explicitly show a database in each node, as recited in claim 1, nor database within router circuitry, as recited in claim 11.

In an analogous art, Mukherjee discloses database (the data structures and code ... are typically stored on a computer readable storage medium, which may be any

device or medium that can store code and/or data for use by a computer system, col. 3, ln. 38-41).

At the time of the invention, it would have been obvious to a person of ordinary skills in the art to include a storage like database within router circuitry. The suggestion/motivation for doing so would have been to guarantee a stated failure-recovery time in a WDM mesh network. Mukherjee, col. 2, ln. 21-22. Therefore, it would have been obvious to combine Mukherjee with Doverspike for the benefit of guaranteeing a stated failure-recovery time in a WDM mesh network, to obtain the invention as specified in claims 1 and 11.

With regard to claims 2 and 12, Doverspike also discloses assigning weighted costs ("minimum weight" path, para. [0019]) to said identified links, where links that have at least one shareable channel are weighted differently (it would have been obvious that the channels have different weights) than links that do not have a shareable channel.

With regard to claim 20, Doverspike further discloses a switching matrix (OXCs with electrical fabrics, para. [0012]).

Allowable Subject Matter

3. Claims 3-10,13-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

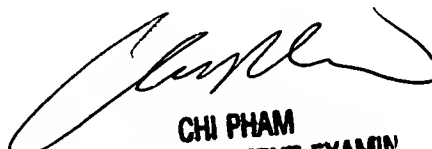
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW
December 20, 2005


CHI PHAM
PERMISSORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER
12/23/05